GE
Lighting Solutions

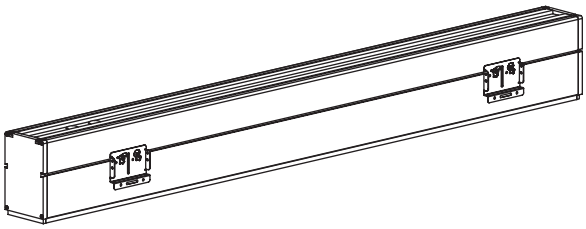
Installation Guide

Lumination™ LED Luminaires

(BL42, BL44 and BL45 Series)

Features

- Long life (50,000 hour rated life)
- 5 year warranty
- Dry location rated



BEFORE YOU BEGIN

Read these instructions completely and carefully.

⚠ WARNING/AVERTISSEMENT	
RISK OF ELECTRIC SHOCK • Turn power off before inspection, installation or removal. • Properly ground electrical enclosure. **RISK OF FIRE** • Follow all NEC and local codes. • Use only UL approved wire for input/output connections. Minimum size 18 AWG (0.75mm²). • Type IC, inherently protected.	**RISQUES DE DÉCHARGES ÉLECTRIQUES** • Coupez l'alimentation avant d"inspecter, installer ou déplacer le luminaire. • Assurez-vous de correctement mettre à la terre le boîtier d'alimentation électrique. **RISQUES D'INCENDIE** • Respectez tous les codes NEC et codes locaux. • N'utilisez que des fils approuvés par UL pour les entrées/sorties de connexion. Taille minimum 18 AWG (0.75mm²). • Type IC, protection inhérente.

Save These Instructions

Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.

Provided in the package are:

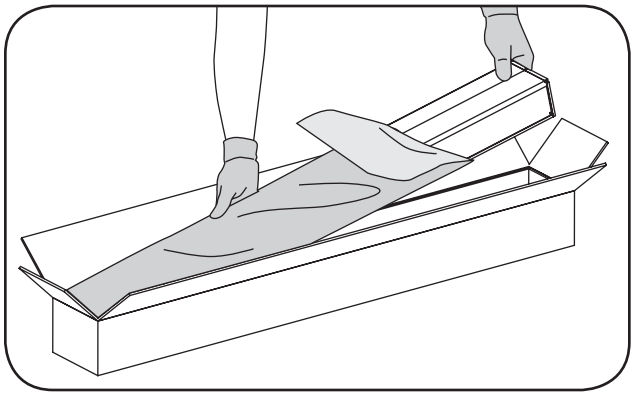
- Luminare
- Universal mounting bracket (4 pieces)
- M3x12mm screws for mounting bracket installation (8 pieces)
- M3 wingnut (8 pieces)
- Ceiling grid safety screw for grid and bracket fixing (4 pieces)
- Primary diffuser
- Optional low glare diffuser with protective film

Tools and components required:

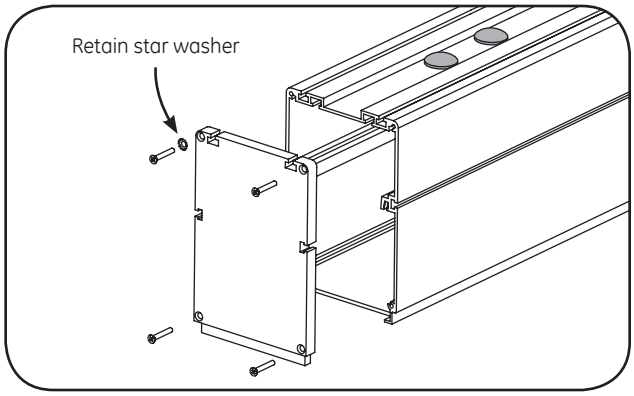
- For end cover install: Philips headed screwdriver
- Rigid (RMC) or flexible (FMC) metal conduit for supply connection
- UL/cUL approved twist-on-wire connectors, min. 18 AWG
- UL/cUL approved conduit fittings for 1/2" conduit trade size (2 pieces)

imagination at work

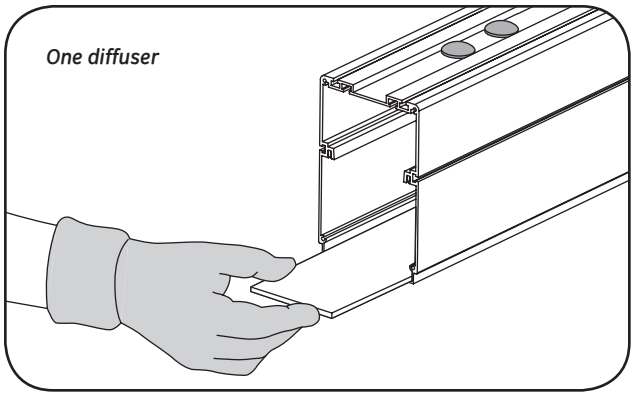
Diffuser Installation



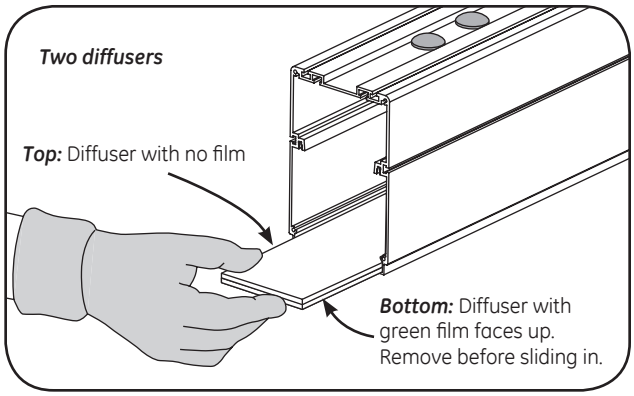
1 Carefully unpack unit from its packaging. Properly inspect for defects before installing. Wear work gloves to prevent dirt and oil from being transferred to the luminaire.



2 Remove end cover closest to the cable glands. Retain star washer for reinstalling end cover.



3A ***One diffuser:*** Slide diffuser into base of luminaire.



3B ***Two diffusers:*** Slide both diffusers into base of luminaire, making sure the diffuser with the green protective film is placed on the bottom.

Prepare Electrical Wiring

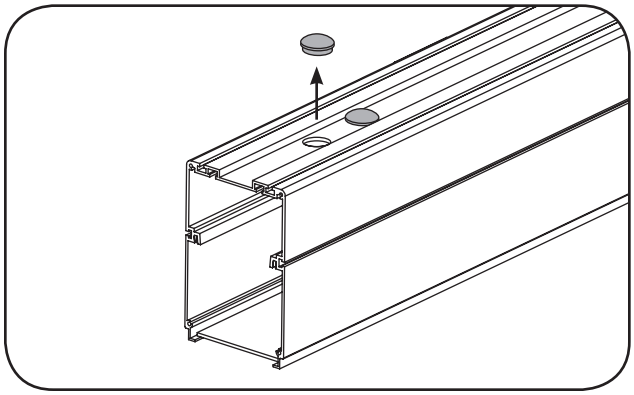
Electrical Requirements

• The LED driver must be supplied with 100-277 VAC, 60 Hz and connected to an individual properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker. Use min. 600V 75°C supply conductor.

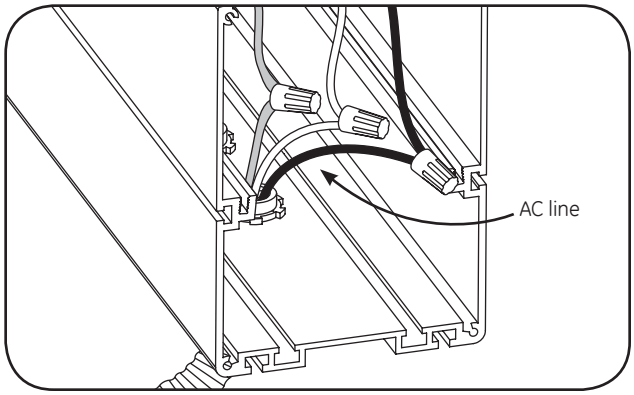
Grounding Instructions

• The grounding and bonding of the overall system shall be done in accordance with National Electric Code (NEC) Article 600 and local codes.

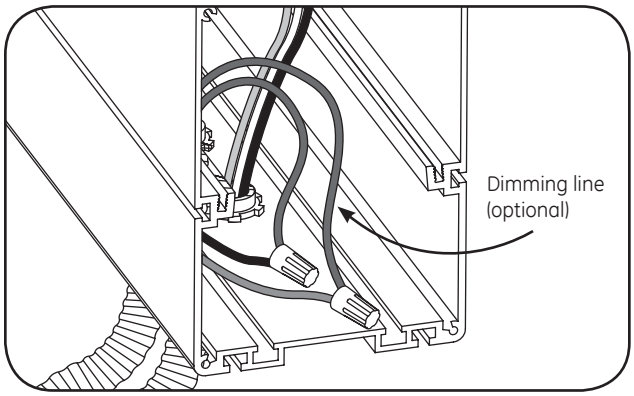
Electrical Connections



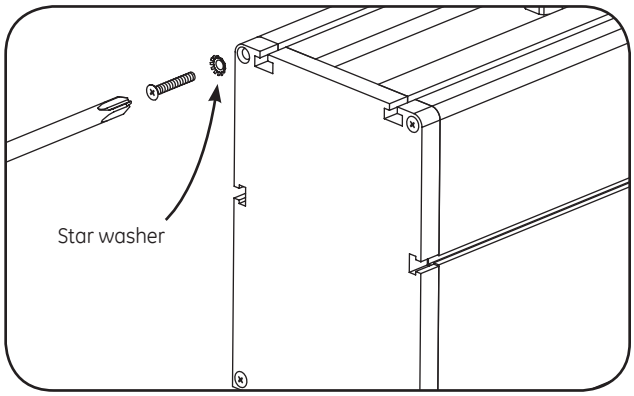
1. Remove knockout closure to insert AC line. Optionally, remove both knockout closures if installing a dimming line.



2. Connect the AC line to the black (line) and white (neutral) input wires of the LED Driver using 18-14 AWG (0.82-2.08 mm^2) twist-on wire connectors. Connect AC line green ground wire to Troffer ground wire using twist-on connectors.

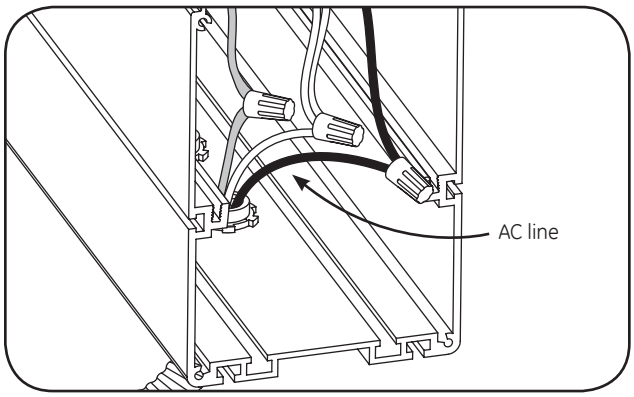


3. ***Optional:*** If using a dimmer, connect black and red wires of the dimming line to the PSU dimming wires with twist-on connectors. Use the appropriate wires for your dimming type according to diagrams below.

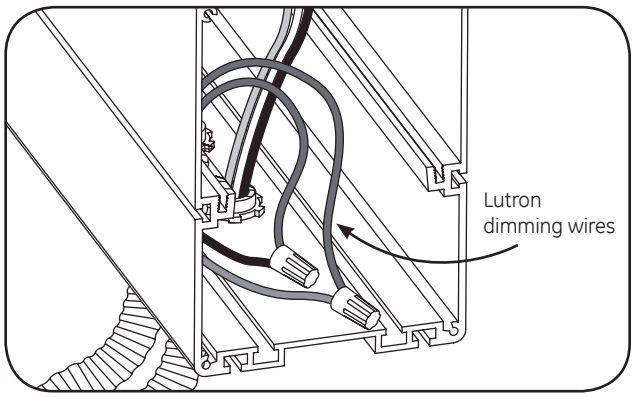


4. Replace cover using at least one star washer under countersunk screw head.

Wiring for Lutron Controller



1. Connect the AC line to the black (line) and to the two white (neutral) input wires of the LED Driver using 18-14 AWG (0.82-2.08 mm^2) twist-on wire connectors. Connect AC line green ground wire to Troffer ground wire using twist-on connectors.

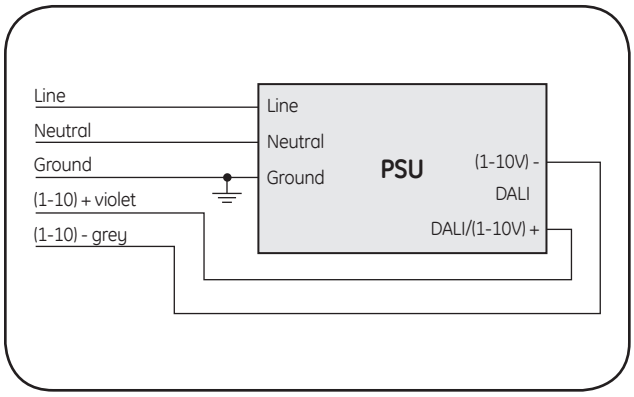


2. ***For Lutron dimming***, connect black and red wires of the dimming line to the two purple Lutron dimming wires with twist-on connectors.

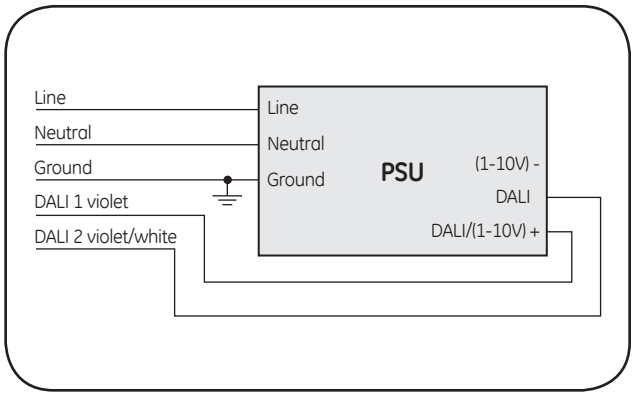
Wiring Diagrams

Optional Installation: 1-10 Volt Dimming or DALI Lighting Controller

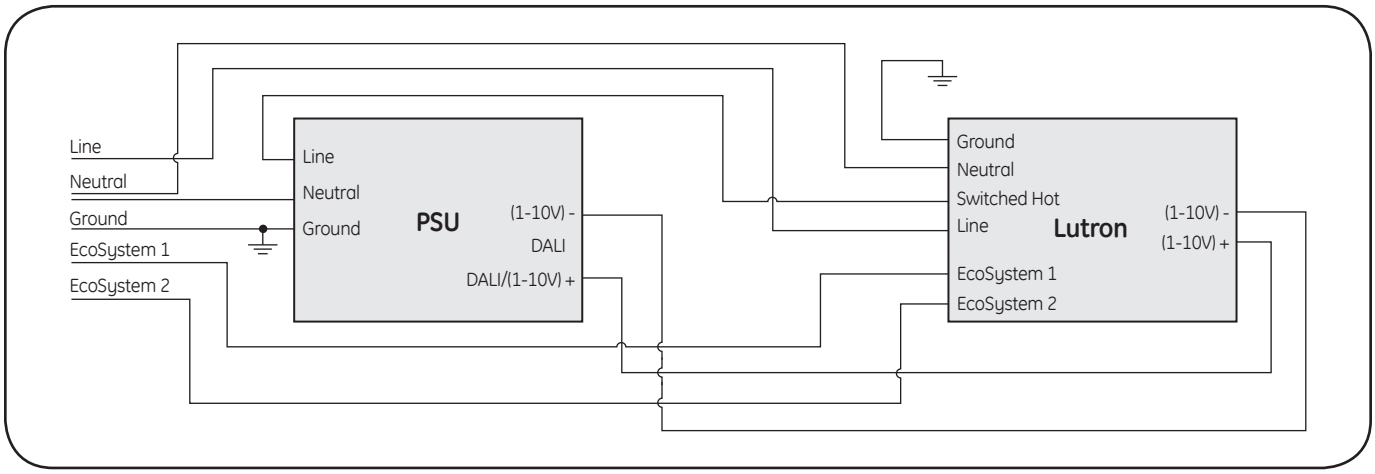
Follow diagram A for 1-10V, diagram B for DALI or diagram C for Lutron dimming.
At output side of LED driver, make appropriate connections using twist-on wire connectors.
Follow lighting controller installation instructions.



A 1-10V wiring diagram



B DALI wiring diagram

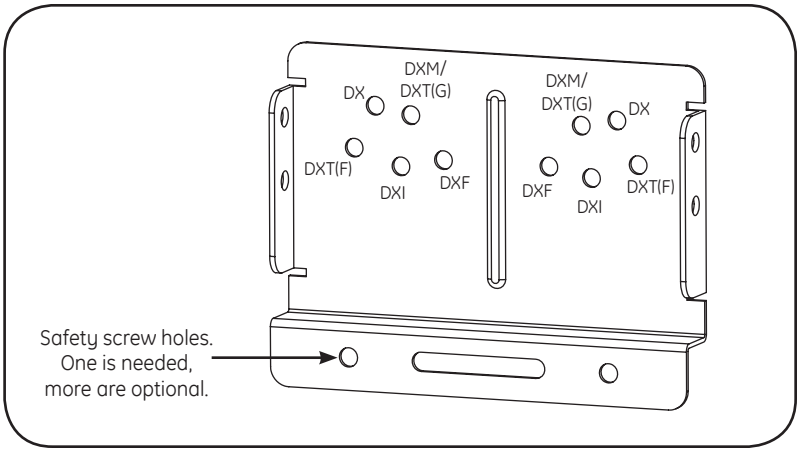


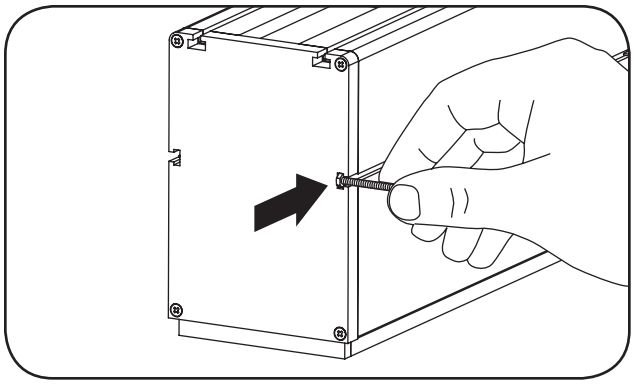
C Lutron wiring diagram

Luminaire Installation

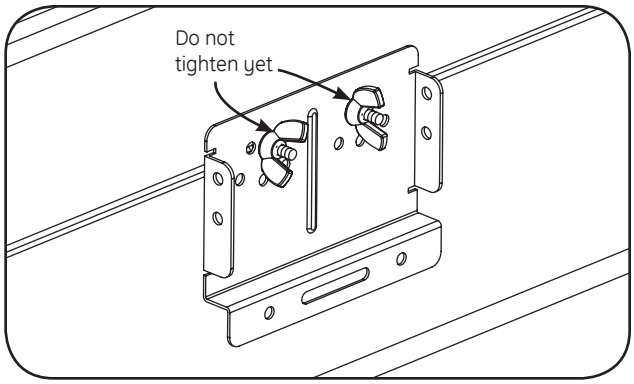
With the supplied universal bracket the product is compatible with the following USG type grids: DX, DXI, DXT, DXF, DXM.

Reference diagram (right) to determine which hole to use for a given grid.

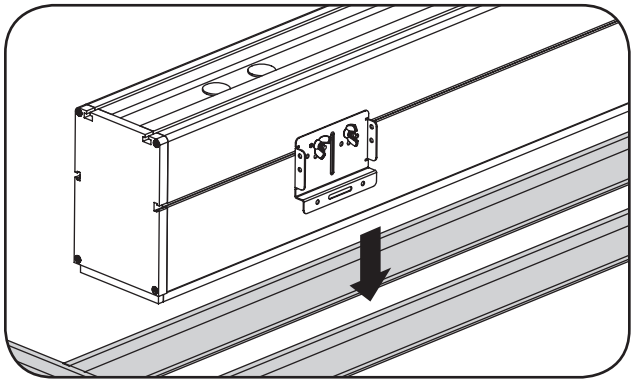




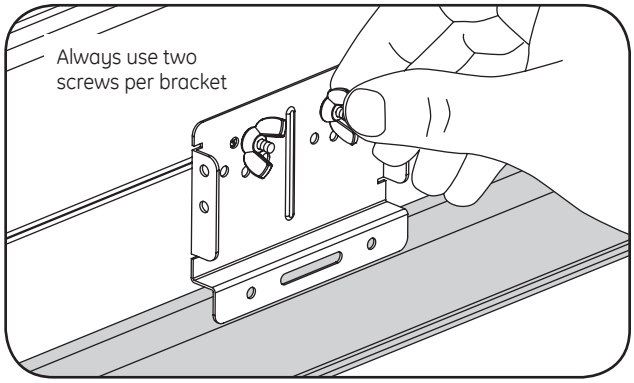
1. Slide four M3x12 bracket mounting screws into housing groove on each side (eight screws per housing are required). If the screw head cannot pass through end cover groove, remove end covers and slide the screw head directly into the housing groove, then re-install end covers.



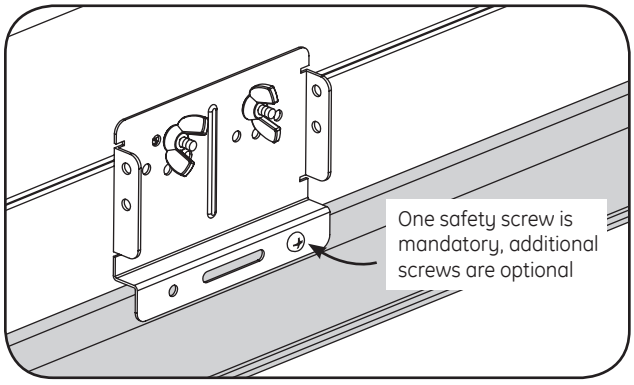
2. Fasten mounting brackets over screws by using two M3 wingnuts for each bracket but do not tighten them at this point. Note that bracket flaps have to be aligned with the groove.



3. Mount fixture into grid system.



4. Fasten the wingnuts of the mounting brackets by hand, being careful not to strip the threads.



5. For added safety, use additional celing grid screws to permanently fix bracket to grid.

⚠ WARNING
Risk of Injury. Improper mounting bracket installation may cause injury or property damage.

Troubleshooting

Symptom	Solution
Luminaire does not light	• Check input voltage and check power supply input/output connections. • Check circuit breaker.
Luminaire is dim	• Maximum recommended supply wire length is exceeded. Refer to EP147 installation guide for Maximum Driver Remote Mounting Distance.
Luminaire is blinking	• Ensure power supply temperature does not exceed its maximum rating. • Refer to the tc point located on power supply.
Luminaire does not dim	• Check dimming wire connection.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This Class [A] RFLD complies with the Canadian standard ICES-003. Ce DEFR de la classe [A] est conforme ‡ la NMB-003 du Canada.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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